

**Attachment No. 2**

**Internall Combustion Units**

**MERIT ENERGY COMPANY  
R. HOBLEIN NO. 2 GAS FACILITY  
JIM HOGG COUNTY, HEBRONVILLE, TEXAS  
PERMIT BY RULE FILING**

**COMPRESSOR ENGINE EXHAUST CALCULATIONS**

**Sample Calculation**

Emission factor (lb/mmBtu) \* Heat Input (Btu/hp-hr) / 453.6 g = LB/HR Emission Rate

**F-1905 WAUKESHA**

<u>Constituent</u>	<u>Emission Factor</u>	<u>Horsepower Rating</u>	<u>BTU/ hp-hr</u>	<u>Emission Rate</u> LB/HR	<u>TONS/YR</u>
NOx	2.21	181.00	9,100.0000	3.6401	15.9436
CO	3.72	181.00	9,100.0000	6.1272	26.8372
VOCt	0.36	181.00	9,100.0000	0.5897	2.5827
VOCnm	0.03	181.00	9,100.0000	0.0488	0.2135

**F-817GU WAUKESHA**

<u>Constituent</u>	<u>Emission Factor</u>	<u>Horsepower Rating</u>	<u>BTU/ hp-hr</u>	<u>Emission Rate</u> LB/HR	<u>TONS/YR</u>
NOx	8.50	85.00	7,000.0000	5.0575	22.1519
CO	38.00	85.00	7,000.0000	22.6100	99.0318
VOCt	2.30	85.00	7,000.0000	1.3685	5.9940
VOCnm	0.35	85.00	7,000.0000	0.2083	0.9121

**Sample Calculation**

Emission factor (g/hp-hr) \* Horsepower Rating (hp) / 453.6 g = LB/HR Emission Rate

**AJAX DPC-280**

<u>Constituent</u>	<u>Emission Factor</u>	<u>Horsepower Rating</u>	<u>Service Time %</u>	<u>Emission Rate</u> LB/HR	<u>TONS/YR</u>
NOx	9.50	269.00	1.0000	5.6338	24.6761
CO	1.20	269.00	1.0000	0.7116	3.1170
VOCt	5.00	269.00	1.0000	2.9652	12.9874
VOCnm	1.10	269.00	1.0000	0.6523	2.8572

**AJAX DPC-180**

<u>Constituent</u>	<u>Emission Factor</u>	<u>Horsepower Rating</u>	<u>Service Time %</u>	<u>Emission Rate</u> LB/HR	<u>TONS/YR</u>
NOx	5.00	173.00	1.0000	1.9070	8.3525
CO	1.00	173.00	1.0000	0.3814	1.6705
VOCt	9.50	173.00	1.0000	3.6232	15.8698
VOCnm	1.00	173.00	1.0000	0.3814	1.6705

**Emission Rate Totals**

NOx	16.2384	71.1241
CO	29.8302	130.6565
VOCt	8.5466	37.4340
VOCnm	1.2907	5.6534